

**July 2015** 

## Lane County

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 9 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Lane County economy.<sup>1</sup> These 9 sectors have a total direct output of approximately \$119 million and support 598.7 jobs in Lane County. Running the model for all 9 sectors simultaneously produces the following results:

Agriculture Contribution in Lane County

				% of Gross		% of Gross
		% of Total	Total	Regional		Regional
Impact Type <sup>2</sup>	Employment	Employment	Value Added <sup>3</sup>	Product <sup>4</sup>	Output <sup>5</sup>	Product
Direct Effect	598.7	31%	\$22,264,358	18%	\$119,041,554	97%
Indirect Effect	57.0	3%	\$6,733,694	5%	\$11,146,714	9%
Induced Effect	65.8	3%	\$5,160,006	4%	\$8,098,971	7%
Total Effect	721.5	37%	\$34,158,058	28%	\$138,287,239	112%

As shown in the above table, agriculture, food, and food processing supports 721.5 jobs, or 37% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$138 million, roughly 112% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 9 agriculture, food, and food processing sectors is approximately \$34 million, or 28% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 28% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: <a href="https://implan.com/index.php?option=com\_content&view=category&id=19">https://implan.com/index.php?option=com\_content&view=category&id=19</a>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 315.2 employees. This table also shows the amount of jobs that are created by the agriculture industry in Lane County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	315.2	\$93,738,354
Support activities for agriculture and forestry	157.9	\$9,816,267
Grain farming	78.9	\$31,689,943
Wholesale trade	36.6	\$7,911,296
Securities and commodity contracts intermediation and brokerage	30.4	\$1,238,173
Animal production, except cattle and poultry and eggs	29.9	\$3,475,836
All other crop farming	16.3	\$2,366,531
Monetary authorities and depository credit intermediation	15.1	\$2,234,990
Accounting, tax preparation, bookkeeping, and payroll services	7.2	\$305,512
Truck transportation	6.9	\$889,232

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$94 million to Lane County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	315.2	\$93,738,354
Grain farming	78.9	\$31,689,943
Support activities for agriculture and forestry	157.9	\$9,816,267
Wholesale trade	36.6	\$7,911,296
Animal production, except cattle and poultry and eggs	29.9	\$3,475,836
All other crop farming	16.3	\$2,366,531
Monetary authorities and depository credit intermediation	15.1	\$2,234,990
Owner-occupied dwellings	0.0	\$2,077,009
Other local government enterprises		\$1,652,063
Securities and commodity contracts intermediation and brokerage	30.4	\$1,238,173

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Lane County's economy.

Sector Description:	Employment	Output
Oilseed farming	0.4	\$988,399
Grain farming	78.9	\$31,689,943
Vegetable and melon farming		\$109,123
All other crop farming	16.3	\$2,366,531
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		" - <b>y y</b>
and farming	315.2	\$93,738,354
Poultry and egg production	0.3	\$171,450
Animal production, except cattle and poultry and eggs		\$3,475,836
Bread and bakery product, except frozen, manufacturing		\$74,694
Landscape and horticultural services		\$196,400

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.